

METHOD AND DEVICE FOR CHANGING A SEMICONDUCTOR WAFER POSITION

ABSTRACT OF THE DISCLOSURE

A mechanical apparatus and method are disclosed for orienting and positioning semiconductor wafers while avoiding contamination of elements on the faces thereof, by only contacting the peripheries thereof. The apparatus may include a frame for wafer supports and a semiconductor wafer gripping arm. The gripping arm is mounted on a translator for movement in X, Y, and Z directions to engage and move wafers in, from, and between supports. The gripping arm comprises a rigid structure with a plurality of semiconductor support wheels mounted thereon to support a wafer only around its periphery. A drive wheel is provided to orient a supported wafer rotationally while it is being supported around its periphery. A detector is provided to detect orientation of the wafer relative to a notch or other position mark on its periphery.

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